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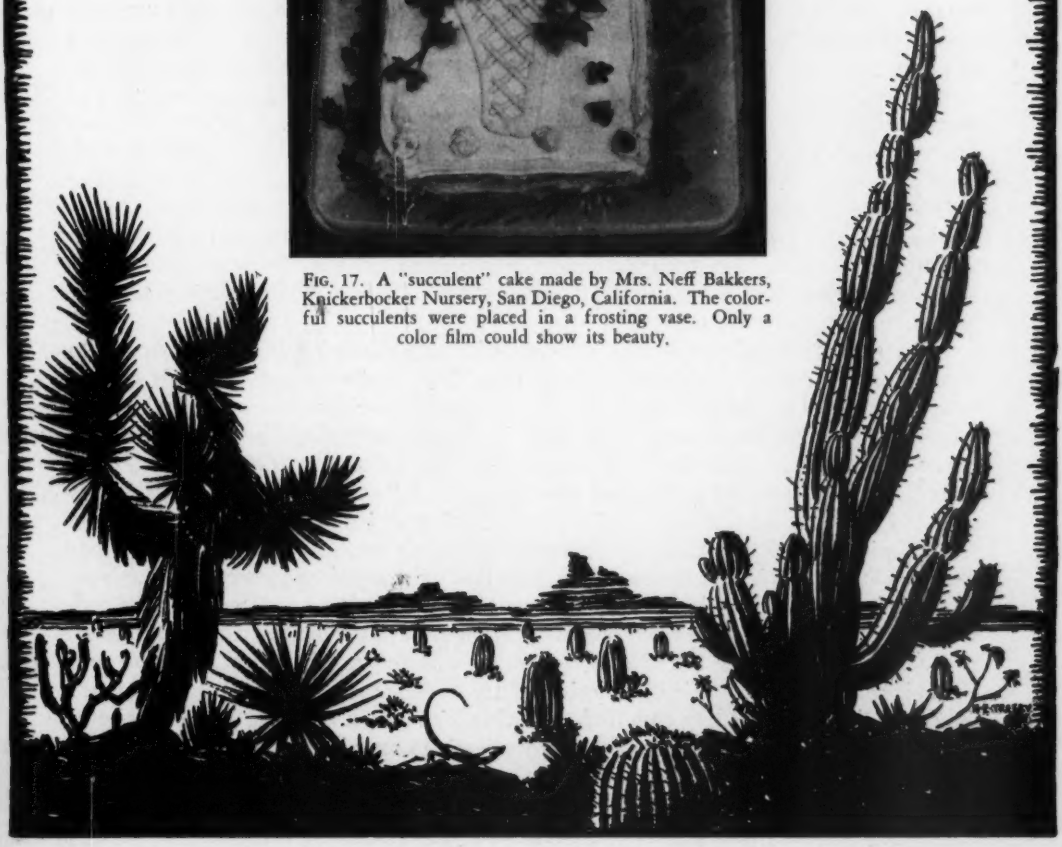
CACTUS AND SUCCULENT JOURNAL

Of the Cactus And Succulent Society Of America

XVII FEBRUARY, 1945 No. 2

FIG. 17. A "succulent" cake made by Mrs. Neff Bakkers, Knickerbocker Nursery, San Diego, California. The colorful succulents were placed in a frosting vase. Only a color film could show its beauty.



CACTUS AND SUCCULENT JOURNAL

Published and Owned by the Cactus and Succulent Society of America, Inc., Box 101, Pasadena 16, California. A monthly magazine to promote the Society and devoted to Cacti and Succulents for the dissemination of knowledge and the recording of hitherto unpublished data in order that the culture and study of these particular plants may attain the popularity which is justly theirs. Subscription $3.00 per year. Foreign $3.00 per year by international money order. Membership in the Cactus Society free with subscription. Mail application to SCOTT HASELTON, *Editor*, Box 101, Pasadena 16, Calif. *Editorial Staff:* THE ENTIRE SOCIETY. Entered as Second Class Matter at Pasadena, Calif., under act of March 3, 1879.

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PLANT DESCRIPTION NUMBER 1

Of a Series by Hubert Monmonier

Photos by GEORGE OLIN. Drawings by FRANCES RUNYAN

Oreocereus Hendriksenianus Bckbg. 1935

Plants up to 1.4 meters in height; caespitose, dense bush-like, branching from the base. Stems up to 9 cm. thick, erect or nearly so. About 10 ribs, rounded broad obtuse, up to 2.5 cm. in width. Ribs divided into tubercles by shallow sulcations which are 3 cm. apart. Tubercles have a definite angular bulge to the sides: widest part of bulge being near the top. The tubercles thus take on the shape of an elongated hexagonal shield. Areoles are large, rounded, app. 1.8 cm. in diameter, situated in the upper portion of the tubercles against the sulcation (crossfurrow). Areoles with dense yellow felt which later turns gray with age. The areoles in the growing crown develop dense matted, twisted locks of hair which are pulled apart gradually with the maturity of the stem. The hair becomes loosely matted and interwoven among the spines, and more or less hangs downwards, and then gradually thins out by weathering action on the old growth. The fine long hair varies as to the individual plant in color, ranging from an almost pure white to a dark brown, but in most plants the hair is yellowish white mixed with light brown, turning gray with age.

Spine clusters include about 8 or 10 recurved acicular radials which range from 1 to 3 cm. in length and are irregular in arrangement, but usually the upper radials are the longest and heaviest. At first one stout subulate central spine develops which varies from 6 to 8 cm. in length and 2.5 mm. to 3.5 mm. in diameter at the basal portion. Eventually 3 more centrals may appear on the mature growth, but not always. One slightly shorter central above the original is recurved upwards and a still shorter recurved central bends sideways on each side of the original, thus causing an irregular criss-crossing of the central spines. On some plants the centrals are slightly annulated, or they may be flattened on the upper side, or in some cases they may be warped or twisted sidewards or upwards irregularly near the point. Color varies from a mottled horn yellow to a reddish brown. (The darker brown-haired individuals have the darkest colored spines.)

Buds develop only on the side of the young mature growth which faces the sun. (This is from Feb. to April in California.) They ascend at an acute angle. The buds are pubescent, being completely engulfed with a blackish brown wool 6 to 9 mm. in length, and are more or less acorn shaped until they reach 15 mm. in length. At this time the

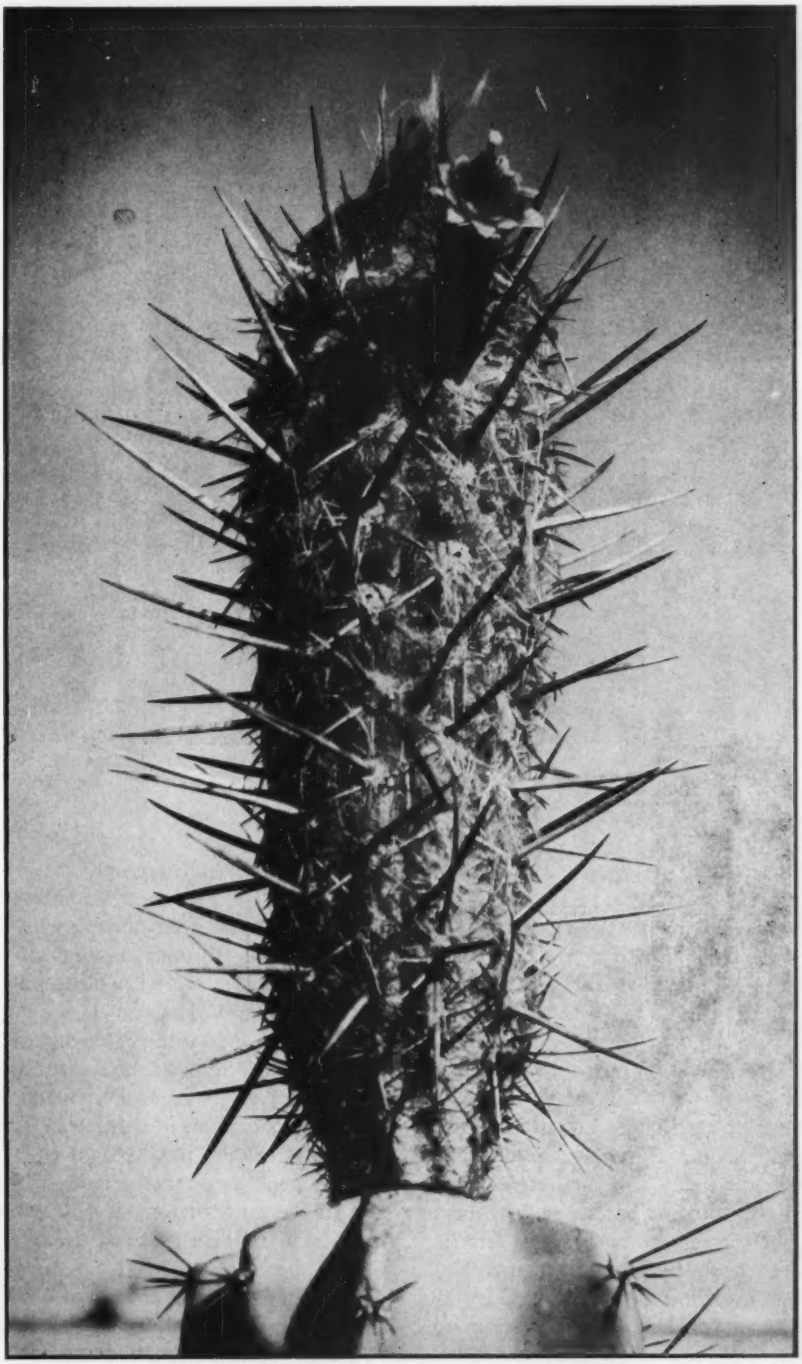


FIG. 18. Grafted plant of *Oreocereus Hendiksenianus* with fully opened flower.

FIG. 19. Side view of flower and bud.

wool no longer covers the apex of the bud and the outer perianth segments become visible (Fig. 20, Nos. 1 and 2). As the perianth tube lengthens it becomes more exposed and is covered with rows of narrow, lanceolate, long accuminate scales, which twist clockwise from the base to follow a spiral (verticellate) formation (Fig. 19). The structural arrangement of the scales may be seen to be 8 complete whorls beginning at the base of the ovary and ending at the perianth-segments. The whorls contain 10 to 12 scales each and end with 3 perianth-segments. The perianth-segments are ovate lanceolate in shape, up to 1.8 cm. in length, and up to 6 mm. at their greatest width just below the tip (Fig. 20, No. 5). When the bud reaches its full maturity, which takes app. 5 weeks, it is about 6 cm. in length, and 8 to 12 mm. in diameter. The perianth tube in maturity becomes digitated in form and usually has a slight constriction between the ovary and the base of the perianth-segments and may or may not become slightly compressed horizontally from the ovary to the constriction (Fig. 20, No. 3). Color of the mature bud ranges from a light green or reddish green at the ovary to a clear red near the perianth-segments.

The flower has a characteristic zygomorphic form like the other species of *Oreocereus* (Fig. 19). When the bud is fully mature the perianth-segments loosen a little at first and the yellow green stigma protrudes 5 to 7 mm. beyond the unopened corolla (Fig.

20, No. 3). On the following day the flower opens and remains open for 3 days. It is 3 cm. in diameter, tubular funnel shaped, with the perianth-segments slightly reflexed (Fig. 20, No. 5). The color of the perianth varies greatly. It ranges from cinnebar red to clear red on the outer segments and deepens to magenta and sometimes purple red on the margins of the inner petals. Petals number up to twenty and are solid in color except sometimes the outer margins as above noted. The plants having the darkest hair will bear flowers with the deepest color. The stamens are numerous, about 85 in number (Fig. 21). Three filaments are attached to the base of each of the 11 inner petals, at proportionate intervals (See Fig. 20, No. 6). The rest are attached in whorls within the tube from a point above the constriction to the base of the corolla, with the exception of a double row attached in a lateral position around the interior the constriction at the point where it begins to widen. Color of the filaments ranges from greenish white

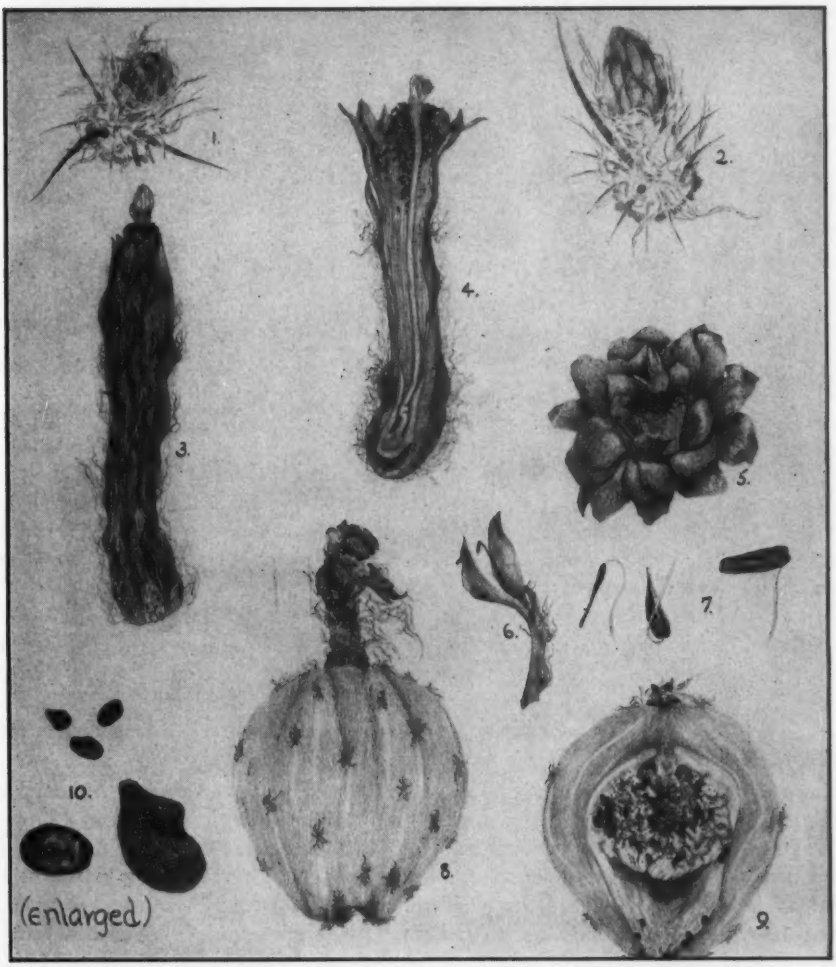


FIG. 20. Botanical plate by Frances Runyan showing evolution of flower. Nat. size.

FIG. 21. Front view of fully opened flower.

at the base to light amber red at the anther heads. Anthers are dark purple in color; 1.5 mm. long, and 1 mm. in width at the widest point; slightly tapered towards the tip. They are attached to the filaments by fine hair-like segments that allow free movement (Fig. 20, No. 7). The brownish purple pollen is very fine and is released in great quantities when the anther heads first rupture. The pistil is about 6.5 cm. in length and is irregular in shape. It has the same variation in color as the filaments. At the point of constriction in the tube there is a definite lateral bend in the style. The style is 1.5 mm. in diameter to the base of the stigma where it widens (Fig. 20, No. 4). The yellowish green stigma lobes, 8 in number are partially united at the base, giving the appearance of a cup shaped hand. The ovary is app. 6 mm. in diameter and somewhat flattened in shape. The old flower is persistent (Fig. 23).

The smooth surfaced, greenish yellow fruit matures in app. 10 weeks. At maturity it is globular to obovoid in shape and app. 3.7 cm. in size in both dimensions (Figs. 22, 23 and 20—No. 8). Development of the fruit is slow for the first 8 weeks. At the end of this time it is about half of its size at maturity. In the next two weeks the rate of growth is greatly increased and the pericarp expands so that a cavity is formed at the base of the ovary. The seeds loosen from the white fleshy pulp in which they are incased and tend to roll into the cavity thus formed. As the tension of the expanding pericarp is increased the fruit finally breaks away from the stem and a basal pore results through which the seeds are dispersed (Fig. 20, No. 9). The brownish black seeds are

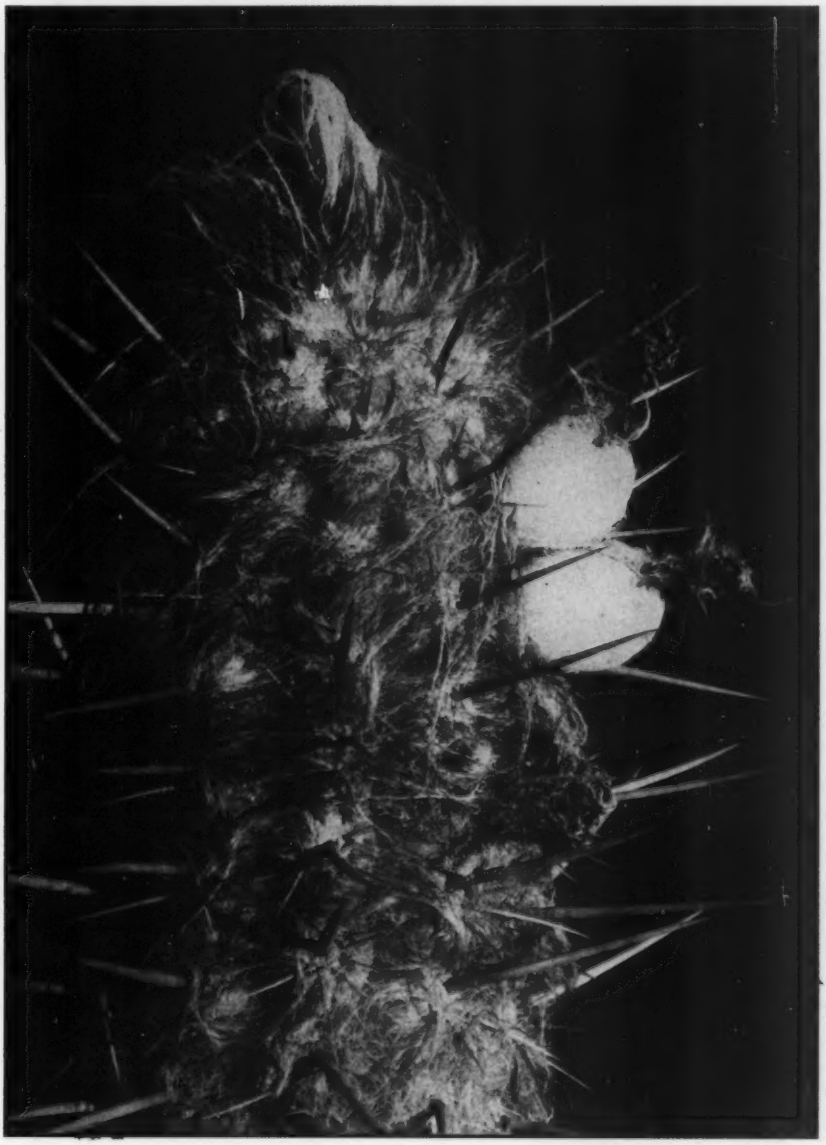


FIG. 22. Side view of seed pods showing attachment to stem.

up to 3 mm. in the largest dimension and irregularly boot-shaped with a beady surface. A large concave, smooth surfaced hilum covers one end of the seed (Fig. 20, No. 10).

Habitat is given as altitudes above 4000 meters in the mountains of south Peru.

Oreocereus Hendriksenianus is one of the newest members of the genus *Oreocereus* (Berger) Riccobono. It is also one of the most spectacular species discovered since Britton and Rose. The species was first introduced by Curt Backeberg who collected it

FIG. 23. Seed pods showing thickness and width.

while on a Peruvian expedition in 1933. In 1935, two years later, he described the plant and gave it the species name of *Hendriksenianus* in honor of his friend Herr Hendriksen of Copenhagen. During this time Blossfeld also collected the plant and both he and Backeberg were loud in praise of this beautiful new plant.

O. Hendriksenianus is most striking in appearance because of its unusually heavy spine clusters and profuse growth of hair; darkest in color of all the *Oreocereus*. Indeed Backeberg states that he first heard of the plant through the natives who called it "pelo rojo", (red hair) and set it apart from other species even in that land of unusual cacti. It seems to have been very rare as no specific location other than Peru is given as to its habitat, but Backeberg states that it is the most northern of the genus and is found at altitudes above 4000 meters.

Experience seems to indicate that the best way to grow this species in our gardens is as a graft on a large cereus stock. It is an extremely slow grower on its own roots but when grafted it soon becomes a specimen plant (Fig. 18). The material used in compiling this data consists of one collected specimen and five mature grafted seedlings. These were observed in bloom and fruit over a period of two seasons. All specimens were grown and flowered in the open in Southern California.

REFERENCES INCLUDE THE FOLLOWING:

KAKTUS *ABC*, Curt Backeberg and F. M. Knuth.
BLATTER FUR KAKTEENFORSCHUNG, 1934, Curt Backeberg.
CACTUS AND SUCCULENT JOURNAL, Vol. 5, No. 3, Page 438.
CACTUS AND SUCCULENT JOURNAL, Vol. 7, No.10, Page 149. Illustration Page 153.
CACTUS JOURNAL (Great Britain), Vol. 1, No. 12, Page 4.

NIGHT BLOOMING CEREUS

We have prepared an interesting discussion on this subject. This will be of especial interest to amateurs and will clarify the often abused term of "Night Blooming Cereus." This will be the next booklet similar to the popular *Hummel Picture Book* and will be packed with clear illustrations.

WERDERMANN REPRINT

This issue of the JOURNAL contains another eight pages of this 120 page book. The March issue will contain an additional 16 pages and the April issue will carry the final eight pages with index. We are making arrangements for binding this book in June at which time we may be able to bind the JOURNALS.

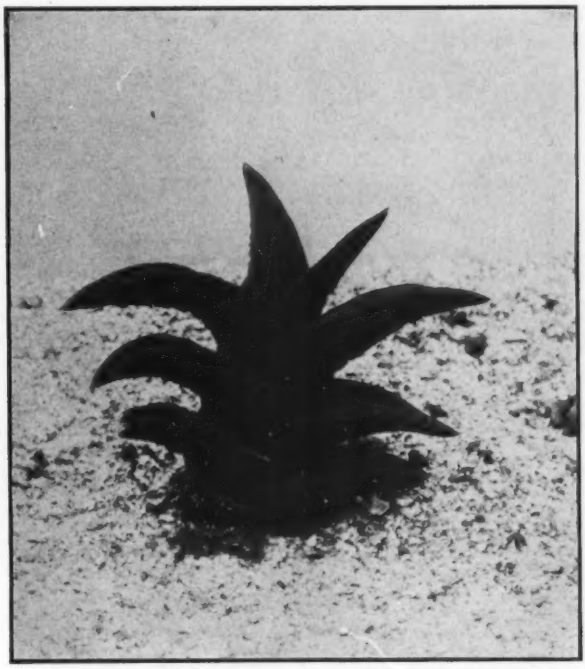


FIG. 24. *Haworthia Schmidtiana* var. *angustata* Poelln, nat. size.

Notes on Haworthias

By J. R. BROWN

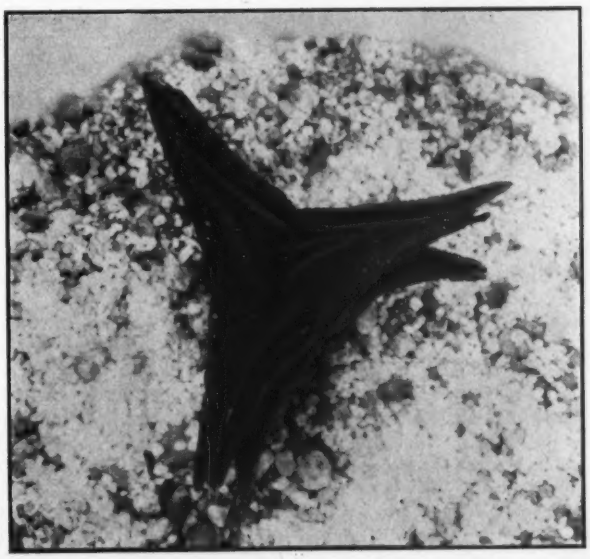


FIG. 25. *Haworthia Schmidtiana* var. *angustata,* Poelln, nat. size.

Haworthia Schmidtiana var. **angustata** Poelln. in Kakt. u. and. Sukk. (1937) 169 photo, in Repert. Sp. Nov. XLIV (1938) 205.

This Haworthia differs from the type by the more loosely arranged, narrower, and more lanceolate leaves, which are less ovate towards the base, somewhat horizontal and with more or less distinctly recurved tips.

Type locality: Cape Colony, Ladismith.

Also recorded from Prieska and from Wellington.

The photos show a plant of *Haworthia Schmidtiana* var. *angustata,* nat. size, also a vertical view of another plant of this var. A photo of *Haworthia Schmidtiana* is also shown on page 26.

FIG. 26. *Haworthia Schmidtiana* Poelln. nat. size.

Epiphyllum Notes

Number One

Descriptions and Classification of Epiphyllum Hybrids

Edited by SCOTT E. HASELTON

As a preliminary to the publication of a book on Epiphyllums, we present the first discussion. The thousands of names and their vague and incomplete descriptions are creating a chaos that may lead to discouragement for those who want to assemble a collection of these Orchid Cacti. Our aim is to arrive at some methodical manner of describing the hybrids and then to review all of the names in circulation. Unless the plant is found to be in cultivation with a definite and complete description, the name should be discarded in favor of those which have real distinct merit.

A recent description from Ladislaus Cutak of the Missouri Botanical Gardens illustrates the need for recorded descriptions. His notes follow:

"This particular plant was ordered by one of our members and it bore the tag 'Vive Rouge.' You have an illustration of yours in color on Poindexter's catalog for 1941 supposed to be this species; however, our plant does not seem to tally with that illustration. I'll appreciate very much if you can tell me which hybrid this is. In the catalog the description states that the flowers vary in size from medium to large, opening wide, brilliant scarlet tinged with violet in the throat, pistil red, stamens crimson with vio-

FIG. 27. Photo of the hybrid described by Ladislaus Cutak.

let anthers. This again does not check with our plant. For your convenience I am giving you the description of our plant and a rough sketch of the petals and sepals below:

Flower 15 cm. long and 9 cm. broad. Ovary and *tube* 9 cm. long. *Tube scales* up to 22 mm. long, 5 mm. wide, absinthe green (light green). *Throat scales* less than 6 cm. long, 6 to 7 mm. wide, carmine at the tip, paler below or tinged with red, lumiere green (light yellow green) at base. *Petals* 55 mm. long, rhodamine purple (pinkish purple) throughout or slightly paler toward the base, with a deep red or carmine stripe through the center. *Outermost petals* slightly longer, narrower, than the inner ones, deep red or carmine on the outside except for the light greenish base, deep red or carmine in the upper half on the inside but getting purplish in the lower half, up to 7 cm. long, 8 to 10 mm. wide. (The flower is really very beautiful but instead of being brilliant scarlet tinged with violet in the throat it is rather a reddish purple with a violet throat.) *Style* much shorter than the petals, slightly tinged with purple. *Stigma lobes* white, 8 in number. *Stamens* white or tinged slightly pink. *Anthers* cream-colored. (These appendages as to color do not fit likewise the description of 'Vive Rouge.' ")

This is the typical reply we had to send Mr. Cutak:

"The flower color certainly does not check for Vive Rouge and the plant is no doubt mislabelled. I have thousands of these plants and in spite of all the care and supervision which I can give them, I know that quite frequently cuttings become mislabelled when handled by disinterested help. I have instructed, coaxed,

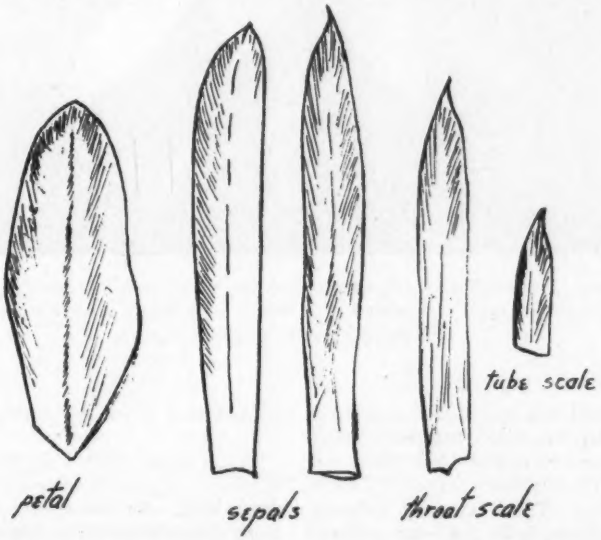


FIG. 28. Petal edged with rhodamine purple and with dark red or crimson through the center. Sepals deep red or carmine in upper half, purplish in lower half. Throat scales lumiere green at base, paler green towards the center, carmine tip.

FIG. 29. Rose Pink (Kelly) shows one of the corolla forms. Is this typical "Cup and Saucer" arrangement or is there a better term? (Haselton photo). See March JOURNAL for other forms.

pleaded and cussed, but in spite of everything, errors are made and I am quite helpless to avoid them. In spite of the excellent description and photographs which you have enclosed, I cannot identify this flower. There have been so many new hybrids developed in the past years, we have about 250 different varieties, that it is almost impossible to identify them without actually seeing the flowers." Thus, our problem is stated.

In the January JOURNAL, page 2, we appealed to readers to send us suggestions for describing the hybrids. An interesting plan was received from Cactus Pete of Los Angeles and it will be published in the March JOURNAL. We welcome your comments and suggestions.

AFFILIATE NOTES

Please mail your Notes to Chas. Place, Rt. 1, Box 388T, La Cañana, Calif., before the 15th of the month, deadline.

I have just received my appointment, for a second term, as Corresponding Secretary, of the Cactus and Succulent Society of America, so I suppose a report on Affiliates is now in order.

During the past year we have added three "top notch," Affiliates to our roster: the Philadelphia Cactus and Succulent Society ,the Detroit Cactus and Succulent Society, and the Jefferson Garden and Cactus Club. The news from the "old timers" indicates that although some are operating under difficulties, they are keeping their organizations intact in preparation for the day when these war clouds may blow away and we may advance under "full steam."

Mrs. Margaret Radden (Cor. Sec.) writes:

"The Cactus and Succulent Club of Chicago struggled through a blizzard to attend their Christmas party which was held Dec. 10, at the home of our charming hostess, Mrs. John Haskia, who has entertained us royally. There was a grab-bag, door prizes and gift plants of *Aloe aristata* and *Oreocereus celsianus* for members and cacti for the guests. Officers for the year of 1945 are as follows: Mrs. Myrtle Akins, President; Mrs. H. B. Relth, Vice-Pres.; Mrs. Cornelis Hunter, Rec. Sec.; Mrs. Margaret Radden, Cor. Sec. and Treas. Wishing every cactus member all over the world a prosperous and victorious New Year."

Prosperity we hope. Victory we assure.

Mrs .Elizabeth Fenton (Sec.) writes:

"The Philadelphia Cactus and Succulent Society held their fall meeting Oct. 22, at the home of Mr. Fred Nabenhauer. We enjoyed looking at his collection housed in a greenhouse, on top of the garage. Many of the succulents and cacti were in bloom. New officers were elected: President, Mr. Fred Nabenhauer; Sec. Teras., Mrs. Elizabeth Fenton. Nine were present with three new members. We are going to try to swell our membership this year. We plan on meeting the second Sunday, every other month. The second meeting took place at the home of Mrs. Barnes on Dec. 10. After the meeting we had a Christmas party. A contest was held to name the most plants. I was fortunate to be one of the prize winners. Plants were distributed in the order of winning."

Keep up the good work, Mrs. Fenton, we are all for you.

Mrs. Ethel Rush (Dep. R.V.P.) writes:

"The Los Angeles Cactus and Succulent Society met Sunday, Jan. 7, at the home of the Rush's. A talk was given by Pres. Rush on the genus *Echeveria.* A number of fine specimens were shown: *E. carminea* (rare) described a couple of years ago by Mr. E. J. Alexander of the New York Botanical Gardens, *E. potosina, E. metallica ,E. gibbiflora* (this was a huge plant), *E. Doris Taylor* (an introduction by Dr. Wm. Taylor of San Francisco), also a very colorful plant of *E. agavoides.* An interesting Echeveria was *E. pubescens* var. *recurvata* which is said to be a sport of *E. pubescens.* This plant in the last three years has produced from its roots one normal branch of *E. pubescens.* Also on display were specimens of: *E. pusilla,* the smallest of the Echeverias and today a very rare plant, *E. scopulorum, E. Derenbergii, E. Pulv-Oliver, E. Set-Oliver* and *E. stolonifera.* Mr. Rush gave a very fine hybrid plant *E. silver moon,** for a door prize, also about fourteen small plants and cuttings to those who wished them."

Excellent support of our good neighbor policy.

*Evidently undescribed.

From the Bulletin of the Heart of America Club, Mary Lee Rose, Editor:

"Last meeting was held at the Lewis home. It was our turn for the 'Round Robin', we spent quite some time reading and discussing the letters. I'm sure all of us enjoyed it very much. Our talk was given by Mrs. Rose on Euphorbias which was also enjoyed and seeing the set of books 'The Succulent Euphorbieae.'

From the Cactus Digest, of the Henry Shaw Cactus Society, Ladislaus Cutak, Editor:

"The first meeting of the year, Sunday ,Jan. 14. Speaker Otto C. Haldenwanger, Sr. 'My Greenhouse and Cactus.' From 'Cacto-graphs' by Lad Cutak: Should you venture into the South African House at Shaw's Garden during the winter season you will be amazed to find a number of colorful flower stalks arising from stemless and caulescent rosettes growing in the beds. To my mind, no succulent collection is complete unless a few of these rosette-forming plants are included. Some grow to massive proportions, others remain dwarfish and are fit for any window display. I am talking about Aloes, members of the Lily Family. This month I want to tell you about *Aloe Zebrina* which grows in Tropical Africa. This species is stemless or nearly stemless and our plants were raised from seed in 1936. The plants have been blooming consistently year after year. In our specimens, each rosette is composed of 8 to 15 striking leaves, lanceolate in outline. The leaves are widely spreading, up to 14 inches long and 2 inches broad at the base. The leaf tips, in most cases become more or less shrivelled and dry up. The upper surface is flat, olivaceaus black in color, and beset with whitish or water-green, oblong, spots. The underside is usually pale green and marked with irregular, dark green stripes. The margins of the leaves are conspicuously and regularly toothed, the teeth or prickles straight from a broad base, very rigid, sharp and thorny, about one-fourth inch apart. The flower stalk is solitary, erect, rather slender, glaucous, about 3 ft. long, loosely and simply branched in the upper third. The branches are suberect, 6 to 7 inches long, subtended by lanceolate-attenuate, membranous bracts up to 1¼ inches long. The bracts are finely brown-lined throughout. Flowers are pedicellate, erect to pendulous, pale pinkish and cream, about 1½ inches long. Pedicel ½ inch long, usually whitish green on the underside, bright green above, subtended by a short membranous bract about half the length of the pedicel. Perianth conspicuously constricted above the ovary, slightly more than an inch long. Lobes erect, somewhat obtuse, ¼ inch long, the inner ones broadest. Outer lobes are white to creamish with pale yellow stripe through center marked by fine green lines. Inner lobes are more creamish yellow. Flower tube is nearly 5/8 inch long, pinkish yellow to orange red in color. Stamens erect, exserted, about an inch long. Filaments whitish to Martius yellow. Anthers erect, xanthine orange (brownish orange). Style shorter than the stamens, picric yellow."

Officers and Board elected for 1945 of the Cactus and Succulent Society of America, Inc., are:

Mrs. Maybelle Place, President; Carl Brassfield, Vice-President; Mrs. Ethel Rush, Secretary; Mrs. June Kelly, Treasurer. Board of Directors: Edgar Baxter, Dr. R. T. Craig, Mrs. Frank Cariss, J. R. Brown, Howard E. Gates, R. W. Kelly, Mrs. W. T. Monmonier, Homer Rush, Boyd Sloane, Ervin Strong, and Robert S. Woods. Chas. A. Place, Corresponding Secretary; Scott Haselton, Editor; Gilbert Tegelberg, Librarian.

The Regional Vice-Presidents appointed by the Executive Board of the Society are:

District 1: Mrs. O. Janzow, 1015 Justin Ave., Glendale, Calif. Mr. Andrews, 5161 Trask St., Oakland, Calif.

District 1a: Miss Muriel Colburn, 1101 East Dartmouth Ave., Englewood, Colorado.

District 2: Mr. Elmer Dutton, 14707 17th Ave. N.E., Seattle, Wash.

District 3: Mr. Pat White, 6130 W. St. Paul Ave., Milwaukee, Wis.

District 4: Mr. Chas. Cole, 1797 Wm. H. Taft Rd., Cincinnati, Ohio.

District 4a: Mr. Ladislaus Cutak, Missouri Botanical Garden, St. Louis, Mo.

District 5: Mr. R. A. Chubb, 631 West Main St., Oklahoma City, Okla.

District 5a: Mr. Price Cross, Corpus Christi, Texas, Box 2268.

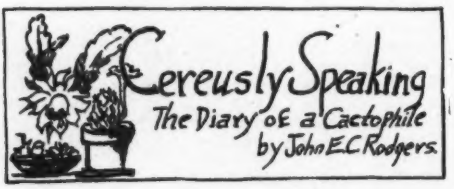
District 6: Mr. Arthur Garrabrant, 39 Garrabrant Ave., Bloomfield, N. J.

District 7: Mrs. Coover, 2018 South Summerlin, Orlando, Florida.

District 8: Mr. A. E. Marchanton, 5729 Willingdon Place, Vancouver, B.C., Canada.

District 9: Mr. Laval Goulet, Amos, Quebec, Canada.

A list of the Deputy Regional Vice-Presidents will be announced as soon as the appointments are complete.



February 1. Fine sprayed my entire collection, second time, with tepid water. Eradicates dust, red spider, and neighbor's soot that works its way in through glass laps (window sills of yours truly also). Good old earth smell—spring! and then—. Examined plants for early "seasonal debility." Plants look fine (?) Now but there's two more months. What then, I wonder?

February 8. Mixed a batch of limey soil for Euphorbias and Mexican and Southwestern United States cacti. Used damp soillitmus test. Put in enough air-slaked lime, old plaster and crushed limestone to give definite blue. Less puttering seems to me than that fancy chemical set I see used by some pseudo-fancy-idea plant killers. "What's those three carbonates doing in Rodgers' soil?" I hear you say. "Stone takes plaster and plaster takes powder" but the plant takes powder (lime) then tears down plaster then stone. Wisdom, eh? My 5 year plan of potting Epiphyllum, Rhipsalis, etc., soil I use when pink and blue litmus is used—pink stays pink—blue turns light pink. Mildly acid soil. Makes 'em strut their stuff.

February 10. No bright sunlight as yet. In fact 8 days of "smuggy sunshine" since Christmas. But it'll come, brethren and sisters, and my plants will not be the only ones that'll enjoy it. Watch temperatures. I do! 50-55° night temperatures from now on. No chills for my bench plants while I try to save fuel. It ain't healthy. From December to February—yes. Fuel is thrown away if too much heat is given because most of my plants rest—I don't. I fight "summer invaders—bugs."

February 13. Opuntia compressa (*O. opuntia*), *polyacantha* and *fragilis* buried under 3 feet of drifted snow since December 10th. Bet field mice will feast on those plump Opuntia seeds of *compressa* and the purplish green fruit of the others. Saw a field mouse scudding across the snow like a phantom. Didn't expect to plant seeds anyway. My Opuntias in raised bed, stone filled in with sand, garden soil and limestone gravel are prolific enough now. *O. compressa* had about 100 flowers. Very few were fruitless.

February 17. Ceropegia woodii, barkleyi, radicans, stapeliiformis and *sandersonii* growing new shoots. Resting since last October. Double-horned seed pods (milkweed-like but smoother and longer) on *woodii* and *barkleyii* have been opened. Several parachutes floated up to top shelves. No paratroopers, however. *Ceropegia* "penetration" expected to show up next spring.

February 20. Haworthia arachnoides again rooted firmly into pot of soil. Used to worry about losing this gem. Re-roots. Sets green but dormant lily-like bulb on top of soil. Resting. In November or early December puts out new whitish roots beside old fleshy ones which are dried back slightly. After rest, begins new growth and leaves begin opening also. When growth commences I sift soil in pot about plant, and it "stays put." Grows, blooms and rests again. One of my favorites for over 5 years. No Bug-a-boo now. (There are several others of this genera that does the same for me.) Treat 'em the same. It works.

February 23. Have started on a list of 12 Epiphyllums that'll give me January to January blooms. One a month I mean. It's true there are some varieties that bloom this way. So says I an Epiphyllum Calendar. Who'll be the first. Send me your list or better send it to Scott. The old volumes of the JOURNAL will help—you bet.

February 25. Have come to the conclusion that hybrid Cereii grows faster than species. "Shucks," say you, "I've known that for years." Well, it's I who sticks my neck out each month. Been letting my mud-dauber wasp colonies prosper for several years in my attic rooms and my potting room. Feed on spiders. Friends in my greenhouse not so many webs to clutter up for dust catching.

February 28. Rounding up those 4-F's in my collection. Have studied ways and means for years on several of them to get them to bloom. Several have been restored to normal by intensive research and by "guess" methods. Some I find have "Hermit souls that dwell alone, etc." while others back in "show-offish, childish-whim type" to get my attention. Human almost—says this school teacher.

Isolationists and Hermits

Haworthias	Trichocereus tersheckii
Euphorbias	Ferocacti
Stapelias	Echinocereus horizonthalonius
Huernias	Hamatocactus setispinus
Cephalocereus senilis	Homalocephala texensis

Pampered Darlings

Epiphyllums, especially "Orchid Cacti"	Hylocerei
	Selenicerei
Echinopsis	Rhipsalis
Cephalocereus	Ceropegias
Euphorbioides	Echeverias

These are my observations again. If you disagree I'm at 1229 8th Street, Lorain, Ohio.

SPINE CHATS

LADISLAUS CUTAK

Dr. William Trelease, the famous Agave and Yucca expert, has gone to his eternal rest. This eminent American botanist and first director of the Missouri Botanical Garden died of pneumonia at his home in Urbana, Ill., on January 2, in his 87th year. Doctor Trelease came to St. Louis in 1885 on an invitation extended by Henry Shaw to assist him in the development of Shaw's Garden, which since then has become one of the finest institutions of its kind in the world. After Shaw's death in 1889, Trelease was appointed director and remained in that capacity for 23 years, resigning in 1912 to head the department of botany at the University of Illinois in the ensuing year. While at the Garden, Prof. Trelease pursued his studies in taxonomic problems involving several plant families and wrote many papers and reports on botany and entomology. Although keenly interested in cacti, he had a devout love for the liliaceous Yuccas and the amaryllidaceous Agaves and wrote treatises on these, which even today are sources of valuable information unsurpassed by any other monographs. He was a member of many national and international organization; in many of which he served as chairman and president. He is commemorated in many plant names: including *Opuntia Treleasei, Lemaireocereus Treleasei, Agave Treleasii* and *Sedum Treleasei* to name a few, as well as in a high mountain peak, Mt. Trelease, at the head of Clear Creek in Colorado. The distinguished botanist was born in Mt. Vernon, N. Y., on February 22, 1857. At 25 he was married to Miss Julia M. Johnson and out of this marriage five children were born. One son, Sam Farlow, followed in his father's footsteps and accompanied him on many of his collecting trips. For rendering great assistance on these trips, the elder Trelease named a liliaceous genus, *Samuela,* for his son. Funeral services for the late Dr. Trelease were conducted in Urbana with burial in Bellefontaine Cemetery in St. Louis.

* * *

"In Search of Succulents" is a vivid account of an exciting hunt for Stapeliads undertaken by Mrs. Frances Milner to Wylie's Poort, one of the most romantic places on the way to Rhodesia in Africa. Wylie's Poort, a splendid gorge whose sides rise steeply many hundreds of feet, carry in their rocky niches a great variety of Aloes, Ferns and glowing Cotyledons. Within a square mile from the center of the gorge is the only known place where *Stapelia clavicorona* has been found. The writer, who is an ardent collector of succulents, tells of her farm among the foothills of the Drakensberg Mountains, where she has a fascinating rock garden filled with exciting succulents. The hunting of Stapeliads is her chief holiday preoccupation. The trip tells of meeting up with such intriguing species as *Stapelia kwenbensis, Caralluma maculata, C. melanantha, Duvalia polita* and *Tavaresia grandiflora.* This descriptive narrative appeared in the Journal of the Royal Horticultural Society (London), March, 1944, issue.

* * *

Botanically speaking, HONDURAS, according to Professor T. G. Yuncker of DePauw University, is one of the least known of Central American countries. Behind the coastal range of mountains there lies a plateau-like tableland and much of its vegetation is like that of desert regions. A number of cacti, some of which attain tree-like forms 30 to 40 ft. in height, are quite common. Paul Standley of the Field Museum described two new cacti from Dr. Yuncker's collections in 1940. To the tall torch cactus growing in the semi-arid region of the Aguan River Valley above Olanchito he gave the name of *Cereus* (Lemaireocereus) *Yunckeri* and stated that it bears close relationship to *Lemaireocereus Eichlamii* of Guatemala and perhaps may be too close for permanent specific segregation. To the tree *Opuntia* of the Aguan Valley, which presumably is the same as that of the Comayagua Desert of Honduras and perhaps also as that of the Motagua Valley of Guatemala, where this plant forms a conspicuous feature of the landscape, he assigns the name *Opuntia hondurensis.* Britton & Rose, as you will recall, do not mention any true tree Opuntias in their account of the Cactaceae in Central America. This new prickly pear has a massive columnar trunk and a large dense rounded crown.

* * *

Sarcostemma australe, commonly known as "Caustic Vine," is a wide-spread milkweed in Australia, where it is regarded as a very poisonous plant to stock. Feeding experiments have definitely shown the leafless vine to be poisonous to all classes of stock. The animals become restless, there is salivation, champing of the jaws and they go down. Spasms occur from time to time and death occurs in from 12 to 24 hours.

* * *

Each month finds one, two or three cactus friends dropping in on me at the Garden. They come from all parts of the country. Many of them are old friends and regular pen pals but frequently newcomers make their appearance and subsequent acquaintance. I cannot remember all the faces present at the 1941 Convention but I had the opportunity to get better acquainted with Mrs. L. P. Zimmerman of Waseca, Minnesota, when she visited the Garden last month. This gracious lady got her start in the fascinating cactus hobby by purchasing her first plants in Woolworth's 5 and 10 store. Subsequent purchases resulted in a small collection and then she heard about our national Cactus Society which she promptly joined. A series of tragic incidents in 1939 and 1940 lowered her vitality to the point where she became alarmingly moody. However, a story on Shaw's Garden in the Saturday Evening Post and an invitation to attend the first cactus convention in St. Louis raised her spirits sufficiently to be noticed by her husband who realized that a trip would do her good and so presented her with a round trip ticket to the convention city. That trip opened a new world to Mrs. Zimmerman. Her collection consists of about 500 plants and she cares for all of them personally. In the spring she lugs the potted plants outside, brings them indoors in the fall and performs all other duties that are required in maintaining a healthy collection. The candelabriform Euphorbias are her esteemed pets although Sedums and Mesembryanthemums run a close second. She also possesses a precious few Haworthias and yards of twining night-blooming Cerei. I was surprised to hear that the Mammillarias have given her the least satisfaction of the cacti, although she has some very beautiful specimens of them in her collection.

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BOOK NOTES

In order to avoid raising the prices of cactus and succulent books, the following will not be available through dealers:

The Mammillaria Handbook (see adv.) Robert T. Craig.

California Cactus ($2.50) Edgar M. Baxter.

Glossary of Succulent Plant Terms ($3.85) Marshall and Woods.

Cactaceae ($5.15) Marshall and Bock.

Cactus and Succulent Journal ($3.00 per year).

Amateur Bulletin ($2.10 bound, $1.05 unbound).

Until further notice these books are available direct from the publisher, Abbey Garden Press, Box 101, Pasadena 16, California.

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MONOGRAPH ON COCHEMIEA

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